1/12

配列表

SEQUENCE LISTING

| | | | | | | | | : | • • • • • • | _ | | | | | |
|---------|---------|--|-------|------|------|------|-----|------|-------------|-----|------|-------|-------|-----------|------|
| <110> | The | Inst | itute | e of | Phys | ical | and | Chem | ical | Res | earc | h and | l Kab | ushiki Ka | isha |
| Dnafor | Dnaform | | | | | | | | | | | | | | |
| <120> | Nove | Novel Polypeptide and Nucleic Acid Encoding the Same | | | | | | | | | ÷. | | | | |
| <130> | 02PF | 257- | PCT | | | | | | | | | | | | • |
| <160> | 18 | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| <210> | 1 | | | | | | | | | | | | | | |
| <211> | 184 | | | | | | | | | | | | | | |
| <212> | PRT | | | | | | | | | | | | | | |
| <213> | Ното | sap | iens | | | | | | | | | | | | |
| <400> | 1 | | | | | | ٠ | | | | | | | | |
| Met Th | r Ser | Phe | Glu | Asp | Ala | Asp | Thr | Glu | Glu | Thr | Val | Thr | Cys | Leu | |
| 1 | | | 5 | | | | | 10 | | | | | 15 | | |
| GIn Me | t Thr | Val | Tyr | His | Pro | Gly | GIn | Leu | GIn | Cys | Gly | He | Phe | Gln | |
| | | 20 | | | | | 25 | | | | | 30 | | | |
| Ser II | e Ser | Phe | Asn | Arg | Glu | Lys | Leu | Pro | Ser | Ser | Glu | Val | Val | Lys | |
| | 35 | | | | | 40 | | | | | 45 | | | | |
| Phe Gly | / Arg | Asn | Ser | Asn | He | Cys | His | Tyr | Thr | Phe | GIn | Asp | Lys | Gln | |
| 50 | | | | | 55 | | | | | 60 | | | | | |
| Val Sei | Arg | Val | Gln | Phe | Ser | Leu | Gln | Leu | Phe | Lys | Lys | Phe | Asn | Ser | ٠ |
| 65 | | | | 70 | | | | | 75 | | | | | 80 | |
| Ser Va | Leu | Ser | Phe | Glu | He | Lys | Asn | Met | Ser | Lys | Lys | Thr | Asn | Leu | |
| | | | 85 | | | | | 90 | | | | | 95 | | |
| lle Va | Asp | Ser | Arg | Glu | Leu | Gly | Tyr | Leu | Asn | Lys | Met | Asp | Leu | Pro | |
| | | 100 | | | | | 105 | | | | | 110 | | | |
| Tyr Arg | g Cys | Met | Val | Arg | Phe | Gly | Glu | Tyr | Gln | Phe | Leu | Met | Glu | Lys | |
| | 115 | | | | | 120 | | | | | 125 | | | | |

| Glu Asp Gly Glu Ser Leu Glu Phe Phe Glu Thr Gln Phe IIe Leu Ser 130 135 140 | |
|--|-----|
| Pro Arg Ser Leu Leu Gln Glu Asn Asn Trp Pro Pro His Arg Pro Ile | |
| 145 150 155 160 | |
| Pro Glu Tyr Gly Thr Tyr Ser Leu Cys Ser Ser Gln Ser Ser Pro | |
| 165 170 175 | ` |
| Thr Glu Met Asp Glu Asn Glu Ser | |
| 180 | |
| | |
| <210> 2 | |
| <211> 1613 | |
| <212> DNA | |
| <213> Homo sapiens | |
| <400> 2 | |
| ggcacgaggg agaggacgtg ctctgccagc cagtgggaag gcaggccgcg cgcgcgggag | 60 |
| cgcgggagga tcggcggctc gcggtcactg gtccctggct cggttccccg caccccgggg | 120 |
| ctcacactta cccgcgcgga ggagcagcgg ccgggtgtcc acccccatcc tgcgcccagt | 180 |
| ctcctcgatt cccctcgctc tgagccggga gagccgaaca gctgaagaga gttcactgac | 240 |
| tocccagoco caggtgggco ttgtgcacat c atg acc agt ttt gaa gat got | 292 |
| Met Thr Ser Phe Glu Asp Ala | |
| . 1 5 | |
| gac aca gaa gag aca gta act tgt ctc cag atg acg gtt tac cat cct | 340 |
| Asp Thr Glu Glu Thr Val Thr Cys Leu Gln Met Thr Val Tyr His Pro | |
| 10 15 20 | |
| ggc cag ttg cag tgt gga ata ttt cag tca ata agt ttt aac aga gag | 388 |
| Gly Gln Leu Gln Cys Gly lle Phe Gln Ser lle Ser Phe Asn Arg Glu | |
| 25 30 35 | |
| aaa ctc cct tcc agc gaa gtg gtg aaa ttt ggc cga aat tcc aac atc | 436 |
| Lys Leu Pro Ser Ser Glu Val Val Lys Phe Gly Arg Asn Ser Asn Ile | |

| 40 | | | | | 45 | | | | | 50 | | | | | 55 | |
|------|------|------|-------|------|------|------|------|------|-------|------|------|------|------|------|-------|-----|
| tgt | cat | tat | act | ttt | cag | gac | aaa | cag | gtt | tcc | cga | gtt | cag | ttt | tct | 484 |
| Cys | His | Tyr | Thr | Phe | GIn | Asp | Lys | Gin | Val | Ser | Arg | Val | GIn | Phe | Ser | |
| | | | | 60 | | | | | 65 | | | | | 70 | | |
| ctg | cag | ctg | ttt | aaa | aaa | ttc | aac | agc | tca | gtt | ctc | tcc | ttt | gaa | ata | 532 |
| Leu | Gin | Leu | Phe | Lys | Lys | Phe | Asn | Ser | Ser | Val | Leu | Ser | Phe | Glu | lle | |
| | | | 75 | | | | | 80 | | | | | 85 | | | |
| aaa | aat | atg | agt | aaa | aag | acc | aat | ctg | atc | gtg | gac | agc | aga | gag | ctg | 580 |
| Lys | Asn | Met | Ser | Lys | Lys | Thr | Asn | Leu | He | Val | Asp | Ser | Arg | Glu | Leu | |
| | | 90 | | | | | 95 | | | | | 100 | | | | |
| ggc | tac | cta | aat | aaa | atg | gac | ctg | cca | tac | agg | tgc | atg | gtc | aga | ttc | 628 |
| Gly | Tyr | Leu | Asn | Lys | Met | Asp | Leu | Pro | Tyr | Arg | Cys | Met | Val | Arg | Phe | |
| | 105 | | | | | 110 | | | | | 115 | | | | | |
| gga | gag | tat | cag | ttt | ctg | atg | gag | aag | gaa | gat | ggc | gag | tca | ttg | gaa | 676 |
| Gly | Glu | Tyr | GIn | Phe | Leu | Met | Glu | Lys | Glu | Asp | Gly | Glu | Ser | Leu | Glu | |
| 120 | | | | | 125 | | | | | 130 | | | | | 135 | |
| ttt | ttt | gag | act | caa | ttt | att | tta | tct | cca | aga | tca | ctc | ttg | caa | gaa | 724 |
| Phe | Phe | Glu | Thr | Gln | Phe | He | Leu | Ser | Pro | Arg | Ser | Leu | Leu | Gin | Glu | |
| | | | | 140 | | | | | 145 | | | | | 150 | | |
| aac | aac | tgg | cca | cca | cac | agg | ccc | ata | ccg | gag | tat | ggc | act | tac | tcg | 772 |
| Asn | Asn | Trp | Pro | Pro | His | Arg | Pro | He | Pro | Glu | Tyr | Gly | Thr | Tyr | Ser | |
| | | | 155 | | | | | 160 | | | | | 165 | | | |
| ctc | tgc | tcc | tcc | caa | agc | agt | tct | ccg | aca | gaa | atg | gat | gaa | aat | gag | 820 |
| Leu | Cys | Ser | Ser | Gln | Ser | Ser | Ser | Pro | Thr | Glu | Met | Asp | Glu | Asn | Glu | |
| | | 170 | | | | | 175 | | | | | 180 | | | | |
| tca | tgaa | caca | iga a | agto | taag | a gg | agaa | atat | gat | ggat | tgaa | gago | tctg | ţta | | 873 |
| Ser | | | | | | | | - | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| gatg | ctgt | at a | gaca | ctaa | a ta | agag | ttga | tta | ıgggt | agt | atat | tata | gt c | atct | gttat | 933 |

gotgtgaaat ttggaattca aaattttgaa gtotgtaaat tgtgttagto attaacttag 993
toacctgttg tattotggat ctacacaaaa ttatttaag tgctottatt aatctgtgag 1053
·gattaatata caaaaagtat cotttgagat gaagtogtgt totcaaaata aggttatatt 1113
attttottt totgottgat tttcatcttg tgttttgott tgttttgta aggaaccatc 1173
tottggtttg gtcacatcag ttcacaacag coatttgtt tcaaggtcaa ggctocaggc 1233
aggttgttac tggtgtttgc agcctgtcag tacttgcagt actggaatag gttctaggct 1293
agtgtctgcg cgtcactgtg gttttagcat gggaggactt atttgagaaa tactacctta 1353
cttttctatg atttctttt acagagttat agtgtgtta ctcctaagat gacagttctc 1413
tttgtctata ttcagcatct aagacaaata tttaaacatt ttaaagaacc actgtgttaa 1473
gtttaggatt atttacttac caaattagaa gtttgacttt tatgtgttat acacaatctt 1533
aaaatttcac gaattcacct ttttaatagt atccatgtac ataataaaat caaagtttaa 1593
ttaaaaaaaa aaaaaaaaaa

<210> 3

<211> 184

<212> PRT

<213> mouse

<400> 3

Met Ser Thr Phe Glu Asp Ala Asp Thr Glu Glu Thr Val Thr Cys Leu

1 5 10 15

Gin Met Thr lie Tyr His Pro Gly Gin Gin Ser Gly lie Phe Lys Ser 20 25 30

Ile Arg Phe Cys Ser Lys Glu Lys Phe Pro Ser Ile Glu Val Val Lys
35 40 45

Phe Gly Arg Asn Ser Asn Met Cys Gln Tyr Thr Phe Gln Asp Lys Gln 50 55 60

Val Ser Arg IIe Gin Phe Val Leu Gin Pro Phe Lys Gin Phe Asn Ser 65 70 75 80

Ser Val Leu Ser Phe Glu IIe Lys Asn Met Ser Lys Lys Thr Ser Leu

| | | | | 85 | | | | | 90 | | | | | 95 | | |
|------|-------|-------|------|------|------|------|-------|-----|------|------|------|-------|-------|-------|-------|-----|
| Met | Val | Asp | Asn | Gin | Glu | Leu | Gly | Tyr | Leu | Asn | Lys | Met | Asp | Leu | Pro | |
| | | | 100 | | | | | 105 | | | | | 110 | | | |
| Tyr | Lys | Cys | Met | Leu | Arg | Phe | Gly | Glu | Tyr | GIn | Phe | Leu | Leu | Gln | Lys | |
| | | 115 | | | | | 120 | | | | | 125 | - | | | Ŷ. |
| Glu | Asp | Gly | Glu | Ser | Val | Glu | Ser | Phe | Glu | Thr | Gin | Phe | He | Met | Ser | • |
| ٠ | 130 | | | | | 135 | | | | | 140 | | | | | |
| Ser | Arg | Pro | Leu | Leu | Gln | Glu | Asn | Asn | Trp | Pro | Thr | GIn | Asn | Pro | He | |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 | |
| Pro | Glu | Asp | Gly | Met | Tyr | Ser | Ser | Tyr | Phe | Thr | His | Arg | Ser | Ser | Pro | |
| | | | | 165 | | | | | 170 | | | | | 175 | | |
| Ser | Glu | Met | Asp | Glu | Asn | Glu | Leu | | | | | | | | | |
| | | | 180 | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| <210 |)> 4 | ļ | | | | | | | | | | | | | | |
| <211 | > 1 | 970 | | | | | - | | | | | | | | | |
| <212 | 2> [| NA | | | | | | | | | | | | | | |
| <213 | 8>, N | louse |) | | | | | | | | | | | | | |
| <400 | > 4 | ļ | | | | | | | | | | | | | | |
| gagt | tage | gag c | agct | tgtc | c cg | cgte | gogoa | gct | gggt | tgt | cagt | tgctg | gog g | gtgta | cctaa | 60 |
| caca | ccga | ica d | agac | ccct | c tt | tttt | ctc | cag | gaga | ıgga | gaca | aggo | tc a | aggag | tcctg | 120 |
| atct | agct | gt g | gcca | ctgg | a ag | acto | tcag | gcc | gggg | agc | gtc | atg | tcc | acc | ttt | 175 |
| | | | | | | | | | | | | Met | Ser | Thr | Phe | |
| | | | | | | | | | | | | 1 | | | | |
| gaa | gac | gct | gat | aca | gag | gag | acg | gtc | act | tgt | ctc | cag | atg | acc | att | 223 |
| Glu | Asp | Ala | Asp | Thr | Glu | Glu | Thr | Val | Thr | Cys | Leu | GIn | Met | Thr | lle | |
| 5 | | | | | 10 | | | | | 15 | | | | | 20 | |
| tac | cat | cct | ggc | caa | caa | agt | ggg | ata | ttt | aaa | tca | ata | agg | ttt | tgc | 271 |
| Tyr | His | Pro | Gly | GIn | Gln | Ser | Gly | He | Phe | Lys | Ser | He | Arg | Phe | Cys | |

| | | | | 25 | | | | | 30 | | | | | 35 | | |
|-----|-----|-----|-----|------|------|------|------|------|------|------|------|-----|------|-----|-----|------|
| agc | aaa | gag | aag | ttt | cct | tcc | att | gaa | gtg | gtg | aaa | ttt | gga | cgc | aat | 319 |
| Ser | Lys | Glu | Lys | Phe | Pro | Ser | He | Glu | Val | Val | Lys | Phe | Gly | Arg | Asn | |
| | | | 40 | | | | | 45 | | | | | 50 | | | |
| tcc | aac | atg | tgc | cag | tat | acg | ttt | cag | gac | aaa | cag | gtg | tcc | cga | att | 367. |
| Ser | Asn | Met | Cys | Gin | Tyr | Thr | Phe | GIn | Asp | Lys | GIn | Val | Ser | Arg | lle | |
| | | 55 | | | | | 60 | | | | | 65 | | | | |
| cag | ttt | gtt | tta | cag | ccg | ttt | aaa | cag | ttc | aac | agc | tcc | gtt | ctc | tcg | 415 |
| Gln | Phe | Val | Leu | Gln | Pro | Phe | Lys | Gln | Phe | Asn | Ser | Ser | Val | Leu | Ser | |
| | 70 | | | | | 75 | | | | | 80 | | | | | |
| ttt | gaa | ata | aaa | aac | atg | agc | aag | aaa | acc | agt | ttg | atg | gta | gac | aac | 463 |
| Phe | Glu | He | Lys | Asn | Met | Ser | Lys | Lys | Thr | Ser | Leu | Met | Val | Asp | Asn | |
| 85 | | | | | 90 | | | | | 95 | | | | | 100 | |
| cag | gag | ctc | ggc | tac | ctc | aat | aaa | atg | gac | ctg | cct | tac | aag | tgt | atg | 511 |
| Gln | Glu | Leu | Gly | Tyr | Leu | Asn | Lys | Met | Asp | Leu | Pro | Tyr | Lys | Cys | Met | |
| | | | | 105 | | | | | 110 | | | | | 115 | | |
| ctc | agg | ttc | gga | gag | tat | cag | ttc | ctg | ttg | cag | aag | gaa | gac | gga | gag | 559 |
| Leu | Arg | Phe | Gly | Glu | Tyr | Gln | Phe | Leu | Leu | GIn | Lys | Glu | Asp | Gly | Glu | |
| | | | 120 | | | | | 125 | | | | | 130 | | | |
| tcg | gtg | gaa | tct | ttt | gag | act | caa | ttt | atc | atg | tct | tca | aga | cct | ctc | 607 |
| Ser | Val | Glu | Ser | Phe | Glu | Thr | Gln | Phe | He | Met | Ser | Ser | Arg | Pro | Leu | |
| | | 135 | | | | | 140 | | | | | 145 | | | | |
| ttg | caa | gaa | aac | aac | tgg | cca | aca | cag | aat | ccc | ata | cca | gag | gat | ggg | 655 |
| Leu | Gln | Glu | Asn | Asn | Trp | Pro | Thr | Gln | Asn | Pro | He | Pro | Glu | Asp | Gly | |
| | 150 | | | | | 155 | | | | | 160 | | | | - | |
| atg | tat | tct | tca | tac | ttc | acc | cac | aga | agt | tct | cct | tca | gaa | atg | gat | 703 |
| Met | Tyr | Ser | Ser | Tyr | Phe | Thr | His | Arg | Ser | Ser | Pro | Ser | Glu | Met | Asp | |
| 165 | | | | | 170 | | | | | 175 | | | | | 180 | |
| gaa | aac | gaa | ctg | tgaa | gagg | gt c | caac | tgga | g ac | acat | tgaa | gga | tgag | gac | | 755 |

Glu Asn Glu Leu

```
acatgggtcg gatgtcaaga gacatcctac ttccgagttt gtgagtgtag cgtagcgcgg
                                                                   815
ctgtcctcat gctgactttc gttttggtaa tagcatttgg aagtctctag actgtgttaa
                                                                   875
tcatcaactt agtcaactga gtttcggctc tacaaagaat taagtgtaca tctgtaaggg
                                                                   935
ttggtgcatc agacacgtct tctgggtaat gaggtcaccc ttgttgcttt tctgcatgat
                                                                   995
gttaccccca tgctttgtct tggtggcagc catctcttgg cccggtcaca tcatttcgta 1055
gcagcctttg tttttcaggt ttagagctcg ggcagattgc tcactggtgt ctgtggcgtg 1115
ctagogottg tagaactaga gtootggaat aagttotaga gtgotgagto actgagtoac 1175
catggcttcc ttatggaaag acttgggaaa tagctccttg attttctttc tgtggaacgg 1235
tagtgtogot ttootatatg taggacotac aacaaacatt taaagaacac tgagatgaag 1295
atggttttct tacaatattg aaagtgaatt ttatgtatct cacagattta aaaatggcag 1355
aaatcaaaac ttttaacagc ctctttgcac atgataaagc cggagcccag ttccttagtt 1415
gottotttgg aacttottaa aggaaaacat gtattottaa aggaaaacat ctattottag 1475
gctgccctat agaagtcagt acctgtgaat atttatatta aatgcttaat tatttctaaa 1535
attitagtit cacataaagt tgtatttatt taaaagatto toattoactt cattitggot 1595
agattaagat gaatgttagt gaacattatg taaaagagga tgaaagccat taagttaaga 1655
taaattotag cattactagt aagtaaggca coctgtatag cttcctctgt aaatgaaatt 1715
taatgctgta acaggtacag gattttgggt aggggaggag gtcaggtggg ggaagttagc 1775
cacattcata ttttgtttt gtttttgttt ttgtttttgt ttttgttttc caacaatagc 1835
ttgctttgaa gctcaggctg gcttggaact cttgatcctc atacatcggc cccctgaatg 1895
ctgtgcctag cttaatgtaa ctgtatttct gcaacagccc tttgaaatta tttctaataa 1955
actgtttggc ctagt
                                                                  1970
```

```
<210> 5
```

<220>

<211> 34

<212> DNA

<213> Artificial Sequence

| <223> | Oligonucleotide primer for PCR | |
|--------|----------------------------------|----|
| <400> | 5 | |
| gaagga | agoog coaccatgto cacctttgaa gacg | 34 |
| | | |
| <210> | 6 | ٧. |
| <211> | 32 | |
| <212> | DNA | |
| <213> | Artificial Sequence | |
| <220> | | |
| <223> | Oligonucleotide primer for PCR | |
| <400> | 6 | |
| gaagga | gccg ccaccatggc tgcagccagt gt | 32 |
| | | |
| <210> | 7 | |
| <211> | 26 | |
| <212> | DNA | |
| <213> | Artificial Sequence | |
| <220> | | |
| <223> | Oligonucleotide primer for PCR | |
| <400> | 7 | |
| agcgga | taac aatttcacac aggaaa | 26 |
| | | |
| <210> | 8 | |
| <211> | 49 | |
| <212> | DNA | |
| <213> | Artificial Sequence | |
| <220> | | |
| <223> | Oligonucleotide primer for PCR | |
| <400> | R | |

| gtttc | ctgtg tgaaattgtt atccgctgca gacatgataa gatacattg | 49 |
|--------|--|-----|
| <210> | 9 | |
| <211> | 41 | |
| <212> | DNA | ٧. |
| <213> | Artificial Sequence | ••• |
| <220> | | |
| <223> | Oligonucleotide primer for PCR | |
| <400> | 9 | |
| agcaag | gttca gcctggttaa gatccttatc gattttacca c | 41 |
| | . \cdot | |
| <210> | 10 | |
| <211> | 22 | |
| <212> | DNA | |
| <213> | Artificial Sequence | |
| <220> | | |
| <223> | Oligonucleotide primer for PCR | |
| <400> | 10 | |
| ccaata | tgac cgccatgttg gc | 22 |
| | | |
| <210> | 11 | |
| <211> | 36 | |
| <212> | DNA | |
| <213> | Artificial Sequence | |
| <220> | | |
| <223> | Oligonucleotide primer for PCR | |
| <400> | 11 | |
| catggt | ggcg gctccttccg gcgatacagt caactg | 36 |

| <210> | 12 | |
|--------|------------------------------------|-----|
| <211> | 22 | |
| <212> | DNA | |
| <213> | Artificial Sequence | |
| <220> | | ٧. |
| <223> | Oligonucleotide primer for PCR | |
| <400> | 12 | |
| ccaata | atgac cgccatgttg gc | 22 |
| | | |
| <210> | 13 | |
| <211> | 37 | |
| <212> | | |
| | Artificial Sequence | |
| <220> | | |
| | Oligonucleotide primer for PCR | |
| <400> | 13 | |
| catggt | ggcg gctccttcaa gtcgacggat ccctggc | 37 |
| (010) | | |
| <210> | 14 | |
| <211> | | |
| <212> | | |
| | Artificial Sequence | |
| <220> | Olimanus Lastida muimau fau DOD | |
| | Oligonucleotide primer for PCR | |
| | 14 | 0.4 |
| goodlg | ttgg cattgattat tgac | 24 |
| <210> | 15 | |
| <211> | 21 | |
| | | |

| <212> | DNA | |
|--------|--------------------------------|----|
| <213> | Artificial Sequence | |
| <220> | | |
| <223> | Oligonucleotide primer for PCR | |
| <400> | 15 | |
| agcaa | gttca gcctggttaa g | 2 |
| | | |
| <210> | 16 | |
| <211> | 31 | |
| <212> | DNA | |
| <213> | Artificial Sequence | |
| <220> | | |
| <223> | Oligonucleotide primer for PCR | |
| <400> | 16 | |
| gacgcg | gtcga ccatgtccac ctttgaagac g | 3 |
| | | |
| <210> | 17 | |
| <211> | 29 | |
| <212> | | |
| | Artificial Sequence | |
| <220> | | |
| | Oligonucleotide primer for PCR | |
| <400> | 17 | |
| gacgcg | toga coatggotgo agocagtgt | 29 |
| | | |
| <210> | 18 | |
| <211> | 43 | |
| <212> | DNA | |
| <213> | Artificial Sequence | |

<220>

<223> Oligonucleotide primer for PCR

<400> 18

ccggttaagc ggccgcagcg gataacaatt tcacacagga aac

43